



**Amendments to the Claims**

This listing of the claims will replace all prior versions and listing of claims in the application:

Claim 1 (currently amended):        An isolated polypeptide which comprises a subsequence: SRFEVW (SEQ ID NO: 22), wherein said peptide causes 50% bundled actin and inhibits actin depolymerization when polymerized in vitro with actin.

Claim 2 (amended):    An isolated polypeptide in accordance with claim 1, comprising the formula: X<sub>4</sub>-X<sub>3</sub>-X<sub>2</sub>-X<sub>1</sub>-X<sub>5</sub>-X<sub>6</sub>, where

X<sub>1</sub> is -SRFEVW,

X<sub>2</sub> is WI,

X<sub>3</sub> is GIVRK,

X<sub>4</sub> is EN,

X<sub>5</sub> is PYL, and

X<sub>6</sub> is KK,

wherein the polypeptide comprises X<sub>1</sub> and at least one of X<sub>2</sub> or X<sub>5</sub>, and optionally at least one of X<sub>2</sub>, X<sub>3</sub>, X<sub>4</sub>, ~~X<sub>5</sub>~~ and X<sub>6</sub>, ~~and if any of X<sub>2</sub>~~ wherein when X<sub>2</sub>, X<sub>3</sub>, X<sub>4</sub>, X<sub>5</sub> and X<sub>6</sub> are present, the amino acids are identical in their respective positions to those in ENGIVRKWISRFEVWPYLKK (SEQ ID NO: 24) as set forth in Figure 1B.

Claim 3 (currently amended):        A peptide of claim 1 which is up to ~~100~~ 20 amino acids in length.

Claim 4 (currently amended):        An isolated polypeptide of claim 1, wherein the peptide is at least 80% homologous with SEQ ID NOS: 2, 3 or 4~~a portion of native *Zea mays* protein sequence as set forth in GenBank Accession Number 1498382~~, and said homology is over the entire length of the peptide; or,

         wherein said peptide causes 50% bundled actin and inhibits actin depolymerization when polymerized in vitro with actin at a molar ratio of 100 to 1; or,

         wherein the peptide is at least 80% homologous with SEQ ID NOS: 2, 3 or 4~~a portion of native *Zea mays* protein sequence as set forth in GenBank Accession Number 1498382~~, and said homology is over the entire length of the peptide, and wherein said peptide causes actin bundling and inhibits actin depolymerization when polymerized in vitro with actin.

Claim 5 (currently amended):        An isolated polypeptide having the sequence E-GI\*---W-----W (SEQ ID NO: 26), where, I\* means I or V, - means any amino acid, wherein said peptide causes 50% bundled actin ~~bundling~~ and inhibits actin depolymerization.

Claim 6 (currently amended):        An isolated polypeptide in accordance with claim 5, comprising a sequence:

         EH\*GIV\*R\*-W----- V\* W (SEQ ID NO: 27), where H\* means H or a conservative substitution therefore, V\* means V or a conservative substitution therefore, and R\* means R or a conservative substitution therefore, and - means any amino acid,~~wherein said peptide causes actin bundling and inhibits actin depolymerization.~~

Claim 7 (currently amended):        An isolated polypeptide in accordance with claim 6, wherein the peptide causes 50% bundled actin and inhibits actin depolymerization when polymerized in vitro with actin.

Claim 8 (currently amended):        An isolated polypeptide in accordance with claim 7, wherein the peptide is polymerized with actin at a molar ratio of peptide to actin of at least 100:1.

Claim 9 (currently amended):        An isolated polypeptide of claim 5, wherein the sequence ~~comprises~~ is SEQ ID NO: 12.

Claim 10 (currently amended):        An isolated polypeptide comprising at least 16 contiguous amino acids in accordance with the formula:

Gly-Ile-X<sub>1</sub>-X<sub>2</sub>-X<sub>3</sub>-Trp-X<sub>4</sub>-X<sub>5</sub>-X<sub>6</sub>-X<sub>7</sub>-X<sub>8</sub>-X<sub>9</sub>-Trp-X<sub>10</sub>-X<sub>11</sub>-X<sub>12</sub>

or a pharmaceutically acceptable salt thereof, wherein

X<sub>1</sub> is Ile, Val, or Leu;

X<sub>2</sub> is Arg, Lys, Asn, or Thr;

X<sub>3</sub> is Arg, Lys, Asn, or Asp;

X<sub>4</sub> is Ile, Asp, Asn, or Glu;

X<sub>5</sub> is Ser or Asp;

X<sub>6</sub> is Arg, Met, or Ala;

X<sub>7</sub> is Phe or Glu;

X<sub>8</sub> is Asp, Glu, Lys, Arg, or His;

X<sub>9</sub> is Val or Ile;

X<sub>10</sub> is Pro or His;

X<sub>11</sub> is Tyr or His; and

X<sub>12</sub> is Leu or Thr;

wherein the ~~addition~~ administration to a patient's cell of said compound results in about 50% of bundled actin in a molar fraction of peptide to actin of at least 100 to 1.

Claim 11 (currently amended): A method for causing actin bundling and inhibition of actin depolymerization in a cell comprising the step of delivering to said cell an effective amount of an isolated peptide which comprises a subsequence: SRFEVW (SEQ ID NO: 22).

Claim 12 (currently amended): The method of claim 11, wherein the isolated peptide comprises at least 16 contiguous amino acids in accordance with the formula:

$X_4-X_3-X_2-X_1-X_5-X_6$ , where

$X_1$  is SRFEVW,

$X_2$  is WI,

$X_3$  is GIVRK,

$X_4$  is EN,

$X_5$  is PYL, and

$X_6$  is KK,

wherein the isolated peptide comprises  $X_1$  and optionally at least one of  $X_2$ ,  $X_3$ ,  $X_4$ ,  $X_5$  and  $X_6$ , and if any of  $X_2$ ,  $X_3$ ,  $X_4$ ,  $X_5$  and  $X_6$  are present, the amino acids are identical in their respective positions to those in ENGIVRKWISRFEVWPYLKK (SEQ ID NO: 24) and said peptide inhibits actin depolymerization when polymerized in vitro with actin as set forth in Figure 1B.

Claim 13 (currently amended): A method of inhibiting growth of cells, where the method comprises administering to the cells an amount of the isolated peptide having the sequence ~~E-GI\*-W-W~~ of SEQ ID NO:26, where, I\* means I or V, ~~—~~ means any amino acid, wherein said peptide causes actin bundling and inhibits actin depolymerization.

Claim 14 (currently amended): The method of claim 13, wherein said isolated peptide ~~comprising~~comprises a sequence:

EH\*GIV\*R\*-W----- V\* W (SEQ ID NO:27), where H\* means H or a conservative substitution therefore, V\* means V or a conservative substitution therefore, and R\* means R or a conservative substitution therefore, and - means any amino acid, wherein said peptide causes actin bundling and inhibits actin depolymerization.

Claim 15 (currently amended): The method of claim 13, wherein said isolated peptide is SEQ ID NO: 10 or SEQ ID NO: 12.

Claim 16 (currently amended): The method of claim 13, wherein the administration of said isolated peptide results in about 50% of bundled actin in a molar fraction of peptide to actin of at least 100 to 1.

Claim 17 (previously presented): A polynucleotide sequence encoding a peptide of claim 5.

Claim 18 (previously presented): A vector containing the polynucleotide of claim 17.

Claim 19 (previously presented): A cell containing the vector of claim 18.